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Remarks

In view of the above amendments to the claims and the following discussion, the applicants submit that the claims now pending in the application are not obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

REJECTIONS

A. 35 U. S. C. § 103

1. Claims 1-8 and 11-15 are not unpatentable over Han et al. in view of Miyashita et al.

Claims 1-8 and 11-15 are not unpatentable over Han et al. in view of Miyashita et al. The applicants submit that these claims are not rendered obvious by the combination of these references.

Claims 1-8 and 11-15 depend directly, or indirectly, from claim 1 and recite a method and apparatus, respectively, for determining the format of an optical recording medium (see, the specification at page 1, lines 5-9). The method includes the steps of reading the table of contents of a first session of the recording medium (see, FIG. 3 and the specification at page 13, lines 2-3), checking whether more than one track is present in the first session (see, FIG. 3 and page 13, lines 3-13), and determining the format of the recording medium to be audio if the checking step yields a positive result, and determining the format to be data else (see, FIG. 3 and the specification at page 13, lines 13-22).

Han et al. (US7050376) discloses a method for determining the format of an optical recording medium according to the table of contents (TOC). For disc discrimination, Han discloses the steps of:

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- obtaining the TOC information of the inserted disc (201; 301; 401; 501; 1101); and
- determining the format of the disc to be audio if this is indicated in the attributive information in the TOC information of the disc (202, 203; 302-306; ...).

As asserted by the Examiner, in contrast to claim 1, Han does not teach the step of "checking whether more than one track is present in the first session". In the present invention, the format of the recording medium is determined according to the results of this checking step.

In contrast, in Han's disclosure the format of the disc is determined according to the attributive information of the TOC. Also if Han does not specify in detail what is meant by "attributive information" and this expression is not a well defined phrase in the art, it is clear from the disclosure that attributive information is part of the data recorded in the TOC. In column 4, lines 3-6, Han defines "The TOC information means that of a file or music attribution, a file or music number, each file or music playing time, and each file or music address recorded onto the disc". In column 4, lines 11-16, Han discloses "the disc discrimination section of the optical disc player obtains the attributive information of the file or music recorded onto the inserted disc in a manner that of perceiving the attribution using an extension of the disc file from the TOC information obtained from the inserted disc." Thus, attributive information in Han's disclosure corresponds to the extension of the disc file, which is derived from the TOC information. Also in the embodiment according to Fig. 3, Han uses the extension of the file in the disc discrimination means (column 4, lines 52-56). In the embodiments according to Fig. 4 and 5, the file extension is also used for the disc discrimination means (column 5, lines 49-52; column 7, lines 59-62). Thus, Han discloses to rely on the attributive information recorded in the TOC for discriminating the disc. The attributive information is in all embodiments the file extension of the file. No alternative is given. Thus, Han discloses a solution for discriminating a disc without any disclosure of disadvantages related to this method. A person skilled in the art has no motivation to use any other teaching to

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find a disc discrimination method, because Han discloses a closed method. Han teaches away from combining the disclosure with any other disclosure in case a disc discrimination method should be implemented.

Han neither discloses nor gives a hint on checking whether more than one track is present in the first session and the consequences of such information for the disc discrimination decision. Han does not explicitly disclose that the disc can comprise more than one session and thus, does not disclose that is sufficient to examine the tracks of the first session for disc discrimination. Further, Han discloses to rely on the TOC entries for disc discrimination. Following the teaching of Han, a person skilled in the art would check the TOC entries of all tracks and decide afterwards about the type of disc. In contrast, in the solution according to claim 1, it is sufficient to identify more than one track in the first session. Afterwards, the disc is assumed to be an audio disc. This has the advantage that not all TOC entries have to be checked in case of an audio disc. This has the further advantage that in case a session contains tracks which are indicated as audio tracks and tracks which are (erroneously) indicated as data tracks in the TOC, the disc can still be discriminated and it is decided that the disc is an audio disc.

Even if a person skilled in the art would combine Han's disclosure with Miyashita (US2002/0101790), this would not lead to the invention claimed in claim 1 of the present application.

Miyashita discloses an information reproducing apparatus having a cue point for specifying a start position for playing back a disc. As cited by the Examiner, Miyashita discloses a system controller, which extracts various information from the attribute data of the TOC, e.g. disc name, title name, artist name, total number of tracks on which information is recorded, individual track number, etc. Miyashita's disclosure is only about playback of music information from a CD or DVD [0028]. Discriminating between data disc and audio disc is not even addressed. Thus, Miyashita does not give a hint on the relationship between the number of tracks and the format of the disc as it is done in the

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present application. Determining the number of tracks is also not disclosed by Miyashita. In the disclosure, it is just stated that the number of tracks is, amongst others, part of the TOC information.

Neither Han nor Miyashita disclose or make obvious to check whether more than one track is present in the first session and then to determine the format of the recording medium to be audio if the checking step yields in a positive result and to determine the format to be data else. Thus, claim 1 of the present application is new and inventive over the cited prior art.

The same arguments apply to claim 11.

Regarding claim 15, Han discloses a method for determining the format of an optical recording medium according to the table of contents (TOC).

For disc discrimination, Han discloses the steps of:

- obtaining the TOC information of the inserted disc (201; 301; 401; 501; 1101); and
- determining the format of the recording medium to be a audio if this is indicated in attributive information of the disc in the TOC information (202, 203; 302-306; ...).

Thus, Han discloses to rely on the TOC information for disc discrimination. As disclosed above, Han uses the file extension for this decision. Han does not disclose to use the number of tracks for deciding if the disc is an audio or data disc. Han neither discloses nor gives a hint that it is sufficient to check whether at least one track is indicated as being an audio track in the table of content, which means in case that more than one track is present, not all tracks of the session have to be checked. In case more than one track is present in the first session as requested in the preamble of claim 15, according to the checking step of claim 15, after finding one track which is indicated as being an audio track in the table of contents, all other tracks are also assumed to be audio tracks. A further check if these tracks are also indicated as being audio in the table of content is obsolete. Thus, the indication in the table of content about the data type of the other tracks is ignored if at least one track is indicated as being an audio track.

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This is not disclosed by Han. Further, Han does not explicitly disclose that the disc can comprise more than one session and thus, does not disclose that is sufficient for disc discrimination to examine the tracks of the first session. Also the disclosure of Miyashita cannot overcome this defect as described above. Therefore, new claim 15 is new and inventive over the cited prior art and should be patentable.

With patentability of these independent claims, the claims dependent thereon should also be patentable for at least the same reasons.

2. Claims 9-10 are not unpatentable over Han et al. and Miyashita et al. in view of Hagashi

Claims 9-10 stand rejected under 35 U. S. C. § 103(a) as being unpatentable over Han et al. and Miyashita et al. in view of Hagashi (U. S. Patent 7,154,822 issued December 26, 2006). The applicants submit that these claims are not rendered obvious by the combination of these references.

Claims 9-10 depend directly, or indirectly, from claim 1 and recite a method and apparatus, respectively, for determining the format of an optical recording medium (see, the specification at page 1, lines 5-9). The method includes the steps of reading the table of contents of a first session of the recording medium (see, FIG. 3 and the specification at page 13, lines 2-3), checking whether more than one track is present in the first session (see, FIG. 3 and page 13, lines 3-13), and determining the format of the recording medium to be audio if the checking step yields a positive result, and determining the format to be data else (see, FIG. 3 and the specification at page 13, lines 13-22).

Han et al. (US7050376) discloses a method for determining the format of an optical recording medium according to the table of contents (TOC). For disc discrimination, Han discloses the steps of:

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- and
- determining the format of the disc to be audio if this is indicated in the attributive information in the TOC information of the disc (202, 203; 302-306; ...).

As asserted by the Examiner, in contrast to claim 1, Han does not teach the step of "checking whether more than one track is present in the first session". In the present invention, the format of the recording medium is determined according to the results of this checking step.

In contrast, in Han's disclosure the format of the disc is determined according to the attributive information of the TOC. Also if Han does not specify in detail what is meant by "attributive information" and this expression is not a well defined phrase in the art, it is clear from the disclosure that attributive information is part of the data recorded in the TOC. In column 4, lines 3-6, Han defines "The TOC information means that of a file or music attribution, a file or music number, each file or music playing time, and each file or music address recorded onto the disc". In column 4, lines 11-16, Han discloses "the disc discrimination section of the optical disc player obtains the attributive information of the file or music recorded onto the inserted disc in a manner that of perceiving the attribution using an extension of the disc file from the TOC information obtained from the inserted disc." Thus, attributive information in Han's disclosure corresponds to the extension of the disc file, which is derived from the TOC information. Also in the embodiment according to Fig. 3, Han uses the extension of the file in the disc discrimination means (column 4, lines 52-56). In the embodiments according to Fig. 4 and 5, the file extension is also used for the disc discrimination means (column 5, lines 49-52; column 7, lines 59-62). Thus, Han discloses to rely on the attributive information recorded in the TOC for discriminating the disc. The attributive information is in all embodiments the file extension of the file. No alternative is given. Thus, Han discloses a solution for discriminating a disc without any disclosure of disadvantages related to this method. A person skilled in the art has no motivation to use any other teaching to

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find a disc discrimination method, because Han discloses a closed method. Han teaches away from combining the disclosure with any other disclosure in case a disc discrimination method should be implemented.

Han neither discloses nor gives a hint on checking whether more than one track is present in the first session and the consequences of such information for the disc discrimination decision. Han does not explicitly disclose that the disc can comprise more than one session and thus, does not disclose that is sufficient to examine the tracks of the first session for disc discrimination. Further, Han discloses to rely on the TOC entries for disc discrimination. Following the teaching of Han, a person skilled in the art would check the TOC entries of all tracks and decide afterwards about the type of disc. In contrast, in the solution according to claim 1, it is sufficient to identify more than one track in the first session. Afterwards, the disc is assumed to be an audio disc. This has the advantage that not all TOC entries have to be checked in case of an audio disc. This has the further advantage that in case a session contains tracks which are indicated as audio tracks and tracks which are (erroneously) indicated as data tracks in the TOC, the disc can still be discriminated and it is decided that the disc is an audio disc.

Even if a person skilled in the art would combine Han's disclosure with Miyashita (US2002/0101790), this would not lead to the invention claimed in claim 1 of the present application.

Miyashita discloses an information reproducing apparatus having a cue point for specifying a start position for playing back a disc. As cited by the Examiner, Miyashita discloses a system controller, which extracts various information from the attribute data of the TOC, e.g. disc name, title name, artist name, total number of tracks on which information is recorded, individual track number, etc. Miyashita's disclosure is only about playback of music information from a CD or DVD [0028]. Discriminating between data disc and audio disc is not even addressed. Thus, Miyashita does not give a hint on the relationship between the number of tracks and the format of the disc as it is done in the

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present application. Determining the number of tracks is also not disclosed by Miyashita. In the disclosure, it is just stated that the number of tracks is, amongst others, part of the TOC information.

Neither Han nor Miyashita disclose or make obvious to check whether more than one track is present in the first session and then to determine the format of the recording medium to be audio if the checking step yields in a positive result and to determine the format to be data else. Thus, claim 1 of the present application is new and inventive over the cited prior art.

Higashi describes a method of adapting data in the TOC to values corresponding to control bits and address data (see, Higashi at column 8, lines 17-20).

In contrast, claim 1 as amended contains the step of "checking whether more than one track is present in the first session". The format of the recording medium is determined according to the results of this checking step. Higashi neither discloses nor gives a hint on checking whether more than one track is present in the first session and the consequences of such information for the disk discrimination decision. Furthermore, Higashi does not disclose that the disk can comprise more than one session and thus, does not disclose that is sufficient to examine the tracks of the first session for disk discrimination. Thus, claims 9-10 are patentable over the combination of Han and Miyashita in view of Higashi.

CONCLUSION

Thus, the applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U. S. C. § 102, or obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

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If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,



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